c) at least two data points in a first partition Si are simultaneously evaluated for moving to every other partition; wherein a subsets of U points are evaluated for moving; wherein an index *i* is utilized to represent the partition to which a data point *x* currently belongs, and the index *j* is utilized to represent the partition that is currently being evaluated for a potential move to which the data point *x* can be moved.

17. (New) The partitional method of claim 16 wherein a predetermined metric is employed for evaluating whether a set of data points U should be moved from the current partition to a second partition, wherein the predetermined metric includes the expression

$$\frac{n_i}{n_i - |U|} |m_U - m_i|^2 - \frac{n_j}{n_j + |U|} |m_U - m_j|^2$$

when the predetermined metric is in a first predetermined relationship with a predetermined value, moving the set of data points U is moved from a current partition Si to a second partition Sj.

18. (New) The partitional method of claim 17 wherein the step of moving the set of data points from a current partition to a second partition includes the steps of:

updating the count of the current partition and the count of the second partition; and

updating the center of the current partition and the center of the second partition.

19. (New) The partitional method of claim 18 wherein the step of updating the counts of the two partitions utilizes the following expressions:

$n_i = n_i - |u|$, and
$n_j = n_j + |u|$

wherein U is the subset of data points (U is a subset of Si) being evaluated for the move, |U| is the size of U that is specified by the size parameter, mU is the geometric center of U, mi and mj are the centers of the clusters and ni and nj are the counts of the clusters.

20. (New) The partitional method of claim 18 wherein updating the centers of these two partitions utilizes the following expressions:

$m_i = (n_i * m_i - m_u)/(n_i - |u|)$, and
$m_j = (n_j * m_j + m_u)/(n_j + |u|)$

wherein U is the subset of data points (U is a subset of Si) being evaluated for the move, |U| is the size of U that is specified by the size parameter, mU is the geometric center of U, mi and mj are the centers of the clusters and ni and nj are the counts of the clusters.--